Claims

- A method of screening for therapeutic agents useful in the treatment of a
 disease comprised in a group of diseases consisting of cardiovascular
 diseases, dermatological diseases, gastroenterological diseases, cancer,
 hematological diseases, inflammation, respiratory diseases, neurological
 diseases and urological diseases in a mammal comprising the steps of
 - i) contacting a test compound with a AdipoR1 polypeptide.

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- ii) detect binding of said test compound to said AdipoR1 polypeptide.
- 2. A method of screening for therapeutic agents useful in the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising the steps of
- i) determining the activity of a AdipoR1 polypeptide at a certain concentration of a test compound or in the absence of said test compound,
 - ii) determining the activity of said polypeptide at a different concentration of said test compound.

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3. A method of screening for therapeutic agents useful in the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising the steps of

- i) determining the activity of a AdipoR1 polypeptide at a certain concentration of a test compound,
- ii) determining the activity of a AdipoR1 polypeptide at the presence of a compound known to be a regulator of a AdipoR1 polypeptide.
- 4. The method of any of claims 1 to 3, wherein the step of contacting is in or at the surface of a cell.
- The method of any of claims 1 to 3, wherein the cell is in vitro.

- 6. The method of any of claims 1 to 3, wherein the step of contacting is in a cell-free system.
- The method of any of claims 1 to 3, wherein the polypeptide is coupled to a detectable label.
 - 8. The method of any of claims 1 to 3, wherein the compound is coupled to a detectable label.
 - 9. The method of any of claims 1 to 3, wherein the test compound displaces a ligand which is first bound to the polypeptide.
- 10. The method of any of claims 1 to 3, wherein the polypeptide is attached to a solid support.
 - The method of any of claims 1 to 3, wherein the compound is attached to a solid support.
- 30 12. A method of screening for therapeutic agents useful in the treatment of a disease comprised in a group of diseases consisting of cardiovascular

diseases, dermatological diseases, 'gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising the steps of

- i) contacting a test compound with a AdipoR1 polynucleotide,
 - ii) detect binding of said test compound to said AdipoR1 polynucleotide.
 - 13. The method of claim 12 wherein the nucleic acid molecule is RNA.

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- 14. The method of claim 12 wherein the contacting step is in or at the surface of a cell.
- 15. The method of claim 12 wherein the contacting step is in a cell-free system.

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- 16. The method of claim 12 wherein polynucleotide is coupled to a detectable label.
- 17. The method of claim 12 wherein the test compound is coupled to a detectable label.
 - 18. A method of diagnosing a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising the steps of
 - i) determining the amount of a AdipoR1 polynucleotide in a sample taken from said mammal,

- determining the amount of AdipoR1 polynucleotide in healthy and/or diseased mammals.
- 19. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising a therapeutic agent which binds to a AdipoR1 polypeptide.

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- 20. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising a therapeutic agent which regulates the activity of a AdipoR1 polypeptide.
- 21. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising a therapeutic agent which regulates the activity of a AdipoR1 polypeptide, wherein said therapeutic agent is
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- i) a small molecule,
- ii) an RNA molecule,
- iii) an antisense oligonucleotide,
- iv) a polypeptide,
- v) an antibody, or
- 30 vi) a ribozyme.

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- 22. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising a AdipoR1 polynucleotide.
- 23. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising a AdipoR1 polypeptide.
- 24. Use of regulators of a AdipoR1 for the preparation of a pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal.
- 25. Method for the preparation of a pharmaceutical composition useful for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal comprising the steps of
 - i) identifying a regulator of AdipoR1,
- diseases, dermatological diseases, gastroenterological diseases, cancer,

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hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases in a mammal; and

- iii) combining of said regulator with an acceptable pharmaceutical carrier.
- 26. Use of a regulator of AdipoR1 for the regulation of AdipoR1 activity in a mammal having a disease comprised in a group of diseases consisting of cardiovascular diseases, dermatological diseases, gastroenterological diseases, cancer, hematological diseases, inflammation, respiratory diseases, neurological diseases and urological diseases.